

REMARKS

I. Introduction

Claims 1-3 and 5-18 are pending. Claims 1, 11, and 18 are independent claims. Claims 1, 3, 9-11, and 13-18 are amended to more clearly recite the features of the invention. Claim 4 is canceled. Based on the foregoing Amendment and the following Remarks, Applicants respectfully submit that the Application is in condition for allowance. Prompt and favorable consideration of this Amendment is respectfully requested.

II. Drawings

On October 26, 2005, the Applicants submitted a Response to the Notice of Non-Compliant Amendment dated October 11, 2005. This Response included a Replacement Sheet for FIG. 5 as required by the Notice. The Office Action Summary on page 1 of the Office Action dated January 12, 2006, indicates that the Replacement Drawing was received, but does not indicate whether or not the drawings have been accepted. The body of the Office Action does not clarify this matter. Accordingly, for purposes of making the record clear, Applicants presume that the drawings have been accepted.

III. Claim Rejections Under 35 U.S.C. §§ 102 & 103

Claims 1-3 and 5-10

In numbered paragraph 2 on page 2 of the Office Action dated January 12, 2006, claims 1-3 and 5-10 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,421,190 to Brandle et al (“Brandle”).¹ By this Amendment claims 1, 2, and 9, are amended to more clearly recite the features of the invention. Specifically, claim 1 is amended to include the features of claim 4. Claim 4 is canceled.

¹ The first line of numbered paragraph 2 recites “[c]laim 1 is rejected under...” (emphasis added). The substance of the rejection on pages 2-3, however, indicates that claims 1-3 and 5-10 are rejected under § 102(b) as being anticipated by Brandle.

Applicants: Steffen PETERS *et al.*
Appl. No. 10/810,890

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987); *see* M.P.E.P. § 2131. Furthermore, “[t]he identical invention must be shown in as complete detail as is contained in the . . . claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989).

Claim 1, as amended, recites:

A measuring device for monitoring a material and determining a parameter that is related to the dielectric properties of the material, comprising

a product area for receiving a traveling strand of fibrous material, wherein the product area is a channel,

a first microwave resonator from which, in operation, microwaves can enter the product area, and

a compensation device for compensating for environmental influences, the compensation device comprising

a second microwave resonator which is shielded from the product area in respect of microwave radiation.
(emphasis added).

In contrast, Brandle discloses a device for measuring gas density, “in particular of the insulating gas of a gas-insulated electrical installation.” Column 1, lines 6-8; Abstract. Specifically, Brandle teaches a gas-density measuring device 1 having a sensor head 2. Sensor head 2 closes, by means of a gastight joint 3, an opening of a metal encapsulation 4 of an electrical installation such as a high voltage switching installation filled with sulfur hexafluoride (SF₆). Column 2, lines 53-62; FIG. 1. The gas-density measuring device 1 further includes oscillatory circuits 7 and 8, each of which has a resonator 11, 12, respectively. Column 3, lines 6-9; FIG. 1. In one embodiment (*see* FIGS. 1, 3), resonator 11 is disposed in a chamber 5 of sensor head 2 and exposed to the SF₆ gas; resonator 12 is disposed in another chamber 6 which is unexposed to the SF₆ gas, for comparison purposes. FIGS. 1, 3; column 3, lines 9-11; column 4, lines 58-59.

Applicants: Steffen PETERS *et al.*
Appl. No. 10/810,890

As noted in numbered paragraph 4 on page 6 of the Office Action, however, “Brandle et al. lacks specifically where the product area is a channel for receiving a traveling strand of fibrous material.” This feature is now recited in claim 1. Accordingly, Applicants respectfully submit that Brandle does not anticipate at least claim 1, as amended. Claims 2, 3, and 5-10, depend from claim 1 and are, therefore, not anticipated by Brandle for at least the same reasons.

In numbered paragraph 4 on page 6 of the Office Action, claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Brandle in view of U.S. Patent No. 6,837,122 to Herrmann et al (“Herrmann”). Although claim 4 is canceled by this Amendment, the features recited in claim 4 are now included in amended claim 1. Thus, for the following reasons the rejection is respectfully traversed for failing to establish a *prima facie* case of obviousness.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *See* M.P.E.P. § 2143.

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. M.P.E.P. § 2143.01(III) (citing *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990)). Furthermore, “[i]n order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.” *In re Oetiker*, 977 F.2d 1443, 1446, 24 U.S.P.Q.2d 1443, 1445 (Fed. Cir. 1992) (Applicant claimed an improvement in a hose clamp which differed from the prior art in the presence of a preassembly “hook” which maintained the preassembly condition of the clamp and disengaged automatically when the clamp was tightened. The Board relied upon a reference which disclosed a hook and eye fastener for use in garments, reasoning that all hooking problems are analogous. The court held the reference was not within the

field of applicant's endeavor, and was not reasonably pertinent to the particular problem with which the inventor was concerned because it had not been shown that a person of ordinary skill, seeking to solve a problem of fastening a hose clamp, would reasonably be expected or motivated to look to fasteners for garments). *See also* M.P.E.P. §§ 2141.01, 2143.01.

Here, there is no suggestion or motivation to modify Brandle or to combine the references because Brandle is non-analogous art. As noted above, Brandle is directed to a device for measuring the density of the insulating gas of a gas-insulated electrical installation, such as a high voltage switching intallation. Brandle teaches the use of two resonators 11, 12, mounted in separate first and second chambers, respectively, the first resonator 11 being operative to measure the density of a gas filling a first chamber and the second resonator 12 being operative to compensate for resonance shifts dependent upon the density of the gas as well as unwanted frequency anomalies due to temperature of the gas, viscosity of the gas, and the interaction of the resonator with the sound waves produced during resonance (*see* FIGS. 1 &3; column 2, lines 15-28). In contrast, the present invention is directed to a measuring device for monitoring a traveling strand of fibrous material, a fibrous material processing machine having such a measuring device, and a method of controlling the density of fibre material in a textile processing machine. The measuring device includes a first microwave resonator and a second microwave resonator, the second microwave resonator being shielded from the product area in respect of microwave radiation to reduce measuring errors caused by different environmental influences and by internal and external disturbance variables relating to monitoring a traveling strand of fibrous material. *See* page 2 of the Specification. Thus, as in *In re Oetiker*, Brandle is not within the field of Applicant's endeavor (i.e., fibrous material measuring devices and processing machines having such measuring devices), and is not reasonably pertinent to the particular problem with which the Applicant is concerned (i.e., reducing measuring errors caused by different environmental influences and by internal and external disturbance variables relating to traveling strands of fibrous material). That is, a person of ordinary skill, seeking to solve the foregoing problem in a fibrous material processing machine, would not reasonably be expected or motivated to look to gas-density measuring devices, such as the one disclosed by Brandle.

Applicants: Steffen PETERS *et al.*
Appl. No. 10/810,890

In view of the foregoing arguments, Applicant respectfully submits that the combination of Brandle and Herrmann is improper and that claim 1, as amended, is allowable. Reconsideration is respectfully requested. Claims 2-3 and 5-10 depend from claim 1 and are submitted as being allowable for at least the same reasons.

Claims 11-18

In numbered paragraph 3 on page 4 of the Office Action, claims 11-18 are rejected under 35 U.S.C. § 102(e) as being anticipated by Herrmann. By this Amendment, claims 11 and 13-18 are amended to more clearly recite the features of the invention. Claim 11 now recites:

A fibrous material processing machine having
at least one fibre processing element, and
a measuring device having
a first microwave resonator from which, in
operation, microwaves can enter a product area, and
*a compensating device comprising a second
microwave resonator shielded from the product area in respect of
microwave radiation*, wherein the measuring device is positioned
at a measuring location and the processing element of the machine
is adjustable in dependence of measurement values obtained at the
measuring location. (emphasis added).

Likewise, claim 18 also recites a “compensation device comprising a *second resonator shielded from the fibre material in respect of microwave radiation*.” Numbered paragraph 5 on page 6 of the Office Action acknowledges that Herrmann fails to teach or suggest a compensating device comprising a second microwave resonator shielded from the product area in respect of microwave radiation. Accordingly, Applicants respectfully submit that Herrmann does not anticipate at least claims 11 and 18, as amended. Claims 12-17 depend from claim 11 and are, therefore, not anticipated by Herrmann for at least the same reasons.

Furthermore, for the same reasons provided above with regard to claim 1, Applicant respectfully submits that the combination of Brandle and Herrmann is improper and that claims

Applicants: Steffen PETERS *et al.*
Appl. No. 10/810,890

11 and 18, as amended, are not rendered obvious in view of Brandle and Herrmann. Claims 12-17 depend from claim 11 and are submitted as being allowable for at least the same reasons.

IV. Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is hereby invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

Date: 4/11/06



Robert Kinberg
Registration No. 26,924
Ryan M. Flandro
Registration No. 58,094
VENABLE LLP
P.O. Box 34385
Washington, D.C. 20043-9998
Telephone: (202) 344-4000
Telefax: (202) 344-8300
Attorney/Representative for Applicants

DC2/733164